

GORDSYEV, Ya.A.; ZIBENBERG, A.I.; BURSHTEIN, D.Ye.

Semi-automat for assembling laminated springs having bushings.
Avt. trakt. prom. no.12:23-25 D '53. (MLRA 6:12)
(Automobile--Springs)

GORDINEV, Ya.A.

Automatic shot-making machine using steel wire as raw material.
Avt. trakt. prom. no.7:23-24 J1 55. (MIRA 8:9)

1. Gor'kovskiy avtozavod imeni Molotova.
(Shot peening)

GORDEYEV, Ye.I.

Quantitative distribution of suspensions in the surface layer
of the eastern part of the Atlantic Ocean. Dokl.AN SSSR 149
no.1:181-184 Mr '63. (MIRA 16:2)

1. Institut okeanologii AN SSSR. Predstavлено академиком Н.М.
Стрековым.
(Atlantic Ocean—Water—Analysis)

GORDEYEV, Ye. I.

Quantitative distribution of the suspended material in the
surface waters of the northern part of the Indian Ocean. Trudy
Inst. okean. 64:202-213 '64. (MIRA 17:7)

GERASIMOV, I.S., red.; GORDENIN, Ye.M., red.; SAGITOVA, S.G.,
tekhn.red.

[Advanced poultry breeding practices in the Tatar A.S.S.R.]
Perekovoi optyt ptitsevodov Tatarii. Kazan', Tatarskoe
knizhnoe izd-vo, 1959. 38 p. (MIRA 14:1)
(Tatar A.S.S.R.--Poultry)

KOSTROW, V.I.; GORDEYEV, Ye.M., red.; SAGITOVA, S.Q., tekhn. red.

[Work practice of mixed brigades on the collective farms of the
Tatar A.S.S.R.] Opyt raboty kompleksnykh brigad v kolkhozakh
Tatarskoi ASSR. Kazan', Tatarskoe knizhnoe izd-vo, 1960. 55 p.
(MIRA 14:9)

(Tatar A.S.S.R.—Collective farms)

GORDYEV, Yu. A.

"On Some Possibilities of Utilizing Tensor Algebra in Questions of the Evaluation of the Exactness of a Point's Position".
Uch. Zap. Vyssh. arkt. mor. uch. lishcha, No. 5, pp 65-101, 1954

The author studies methods of evaluating the exactness of the position of a point on a plane, starting from the results of geodesic measurements. After a lengthy discussion of the mathematical methods involved he determines and calculates the error in a given direction, determines the error ellipse, and criticizes other methods of describing point errors. (RZhMat, No 10, 1955)

SO: Sum No 812, 6 Feb 1956

GORDEYEV, Yu. A.

PHASE I BOOK EXPLOITATION

SOV/5463

Sovetskaya antarkticheskaya ekspeditsiya

Vtoraya morskaya ekspeditsiya na d/e "Ob", 1956-1957 gg.; obshcheye opisanije i nauchnyye rezul'taty (Second Marine Expedition on the Diesel-Electric Ship "Ob", 1956-57; General Description and Scientific Results) Leningrad, Morskoy transport, 1959. 175 p. (Series: Its: [Materialy] no. 5)
Errata slip inserted. 1,200 copies printed.

Sponsoring Agency: Arkticheskij i antarkticheskij nauchno-issledovatel'skij institut.

Ed. (Title page): I. V. Maksimov, Doctor of Geographical Sciences, Professor;
Ed.: L. G. Kaplinskaya; Tech. Ed.: O. I. Kotlyakova.

PURPOSE: This book is intended for oceanographers, meteorologists, and hydrochemists.

Card 1/6

Second Marine Expedition (Cont.)

SOV/5463

COVERAGE: The present volume, the fifth in a series of seven, is a collection of articles (except for two) devoted specifically to the oceanographic, meteorological, and hydrochemical findings of the Second Soviet Marine Expedition conducted on the diesel ship "Ob'" (I. A. Man, Captain) during 1956-57. The first two articles outline the Expedition's organization and program, and provide a general account of its activities during the 223-day voyage, which covered more than 40,000 miles of the Atlantic, Antarctic, and Indian Oceans. The expedition was sponsored by the Arctic and Antarctic Scientific Research Institute of the Glavsevmorput' Ministerstva morskogo flota SSSR (Main Administration of the Northern Sea Route of the Ministry of the Merchant Marine of the USSR) as part of the International Geophysical Year program. Its purpose was to investigate 1) atmospheric processes in the Antarctic region and their effect on the earth's general circulation, 2) basic regularities in the distribution of waters in the southern oceanic zone, 3) exchange of the waters of the southern seas with the waters of the world ocean, 4) geological structure of the sea bottom in the Antarctic region, and 5) the plankton, benthos,

Card 2/6

Second Marine Expedition (Cont.)

SOV/5463

ichthyofauna, and microorganisms of the Antarctic waters. Observations of the magnetic field of the earth were also made. The expedition, headed by Professor Igor' Vladislavovich Maksimov, Doctor of Geographical Sciences and Professor at the Leningradskoye vyssheye inzhenernoye morskoye uchilishche imeni S. O. Makarova (Leningrad Higher Marine Engineering School imeni S. O. Makarov), consisted of the following 8 scientific task forces: aerometeorological (headed by Leonid Gennadiyevich Sobolev); hydrological (Kirill Vladimirovich Moroshkin); geological (Aleksandr Petrovich Lisitsyn); hydrochemical (Aleksey Nikolayevich Bogoyavlenskiy); hydrobiological (Viktor Aleksandrovich Arsen'yev); geophysical (Nikolay Panteleyemonovich Grushinskiy); geographic (Gravrila Dmitriyevich Rikhter); and hydrographic (Yuriy Aleksandrovich Gordeyev). A complete list of the names and affiliations of the 65 scientific and administrative members of the Expedition is contained in the first article. The articles were written by members of the Institut okeanologii Akademii nauk SSSR (Institute of Oceanology, Academy of Sciences, USSR), Gosudarstvennyy okeanograficheskiy institut Gidrometsluzhby SSSR (State Oceanographic Institute of the Hydro-

Card 3/6

Second Marine Expedition (Cont.)

SOV/5463

meteoro logical Service of the USSR), Vsesoyuznyy nauchno-issledovatel'skiy institut rybnogo khozyaystva i okeanografii (All-Union Scientific Research Institute of Fisheries and Oceanography), and the Arctic and Antarctic Scientific Research Institute. There are no references.

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Second Marine Expedition (Cont.)

Kutyurin, V. M. Determining the Content of Chlorophyll in Sea
Water and the Spectral Analysis of Phytoplankton Pigments

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AVAILABLE: Library of Congress (G860. S58)

JA/dwm/bc
11-1-61

Card 6/6

GORENIEV, Yu. A., dotsent, kand.tekhn.nauk

Using the principle of least squares in adjusting dependent
results of measurements. Izv. vys. ucheb. zav.; geod. i aerof.
no.2:19-40 '60. (MIRA 13:6)

1. Leningradskoye vysueye inzhenernoye morskoye uchilishche
imeni adm. Makarova.
(Least squares) (Surveying)

GORDEYEV, Yu.A., dotsent, kand.tekhn.nauk

Adjusting the increase of coordinates in linear triangulation by
the method of conditional equations. Izv.vys.ucheb.zav.; geod.i aerof.
no.6:3-21 '61. (MIRA 15:3)

1. Leningradskoye vysheye inzhenernoye morskoye uchilishche
imeni admirala Makarova.
(Triangulation)

TERPUGOV, K.N., dotsent, kand.tekhn.nauk; GORDEYEV, Yu.A., dotsent, kand.b tekhn.nauk

Adjustment of linear triangulation systems by the condition method using conditional type equations and mechanical rules. Izv. vys. ucheb. zav.; geod. i aerof. no.4:49-65 '61. (MIRA 15:1)

1. Leningradskoye vyssheye inzhenernoye morskoye uchilishche imeni admirala Makarova.

(Triangulation)

FISHMAN, Sh.I.; GORDEYEV, Yu.A., doktor tekhn.nauk, red.;
SHOBAYKO, T.N., red.

[Optical theodolites; textbook] Opticheskie teodolity;
uchebnoe posobie. Leningrad, Leningr. in-t inzhenerov
zhelez-dor. tranz. im. V.N.Obraztsova, 1963. 11 p.
(MIRA 17:5)

SHIROKOV, S.D.; PAU, B.M.; GORDEYEV, Yu.A.

Device for replacing gaskets in the split part of the MAW65c25
gate without emptying pipelines. Mash. i neft. obor. no. 7:41-
42 '65. (MIRA 18:12)

1. Ufimskoye rayonnoye nefteprovodnoye upravleniye.

GORDEYEV, Yu. I.

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PHASE I BOOK EXPLOITATION SOV/5592

Vsesoyuznoye soveshchaniye po vnedreniyu radioaktivnykh izotopov i yadernykh izlucheniy v narodnom khozyaystve SSSR. Riga, 1960.

Radioaktivnyye izotopy i yadernyye izlucheniya v narodnom khozyaystve SSSR; trudy Vsesoyuznogo soveshchaniya 12 - 16 aprelya 1960 g. g. Riga, v 4 tomakh. t. 4: Poiski, razvedka i razrabotka poleznykh iskopayemykh (Radioactive Isotopes and Nuclear Radiation in the National Economy of the USSR; Transactions on the Symposium Held in Riga, April 12 - 16, 1960, in 4 volumes. v. 4: Prospecting, Surveying, and Mining of Mineral Deposits) Moscow, Gostoptekhizdat, 1961. 284 p. 3,640 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tehnicheskiy komitet Soveta Ministrov SSSR. Gosudarstvennyy komitet Soveta Ministrov SSSR po ispol'zovaniyu atomnoy energii

Eds. (Title page): N. A. Petrov, L. I. Petrenko, and P. S. Savitskiy; ed. of this volume: M. A. Speranskiy; Scientific ed.: M. A. Speranskiy; Executive Eds.: N. N. Kuz'mina and A. G. Ionel';

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Radioactive Isotopes and Nuclear (Cont.)

SOV/5592

Tech. Ed.: A. S. Polosina.

PURPOSE : The book is intended for engineers and technicians dealing with the problems involved in the application of radioactive isotopes and nuclear radiation.

COVERAGE: This collection of 39 articles is Vol. 4 of the Transactions of the All-Union Conference of the Introduction of Radioactive Isotopes and Nuclear Reactions in the National Economy of the USSR. The Conference was called by the Gosudarstvennyy nauchno-tehnicheskiy komitet Sovet Ministrov SSSR (State Scientific-Technical Committee of the Council of Ministers of the USSR), Academy of Sciences USSR, Gosplan SSSR (State Planning Committee of the Council of Ministers of the USSR), Gosudarstvennyy komitet Svetla Ministrov SSSR po avtomatizatsii i mashinostroyeniyu (State Committee of the Council of Ministers of the USSR for Automation and Machine Building), and the Council of Ministers of the Latvian SSR. The reports summarized in this publication deal with the advantages, prospects, and

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Radioactive Isotopes and Nuclear (Cont.)

SOV/5592

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development of radioactive methods used in prospecting, surveying, and mining of ores. Individual reports present the results of the latest scientific research on the development and improvement of the theory, methodology, and technology of radiometric investigations. Application of radioactive methods in the field of engineering geology, hydrology, and the control of ore enrichment processes is analyzed. No personalities are mentioned. There are no references.

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Radioactive Isotopes of Nuclear (Cont.)

SOV/5592

Palagnin, V. O. Use of Radioactive Isotopes at the Oil Deposits
of Northern Sakhalin

280

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S/169/61/000/012/037/089
D228/D305

AUTHORS: Gordeyev, Yu. I., Mukher, A. A., and
Srebrodol'skiy, D. M.

TITLE: The present state of radiometric methods and
their effectiveness in the study of sections
of oil, gas, ore, and coal holes

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 12, 1961,
43, abstract 12A413 (V sb. Radioakt. izotopy
i yadern. izlucheniya v nar. kh-ve SSSR. v. 4.
M., Gostoptekhizdat, 1961, 30-33)

TEXT: Methods of gamma-logging (GL) and neutron gamma-
logging (NGL) have obtained the widest application in the study
of wells drilled in oil and gas deposits, the method of gamma-
gamma-logging (GGL) being most used in investigating exploratory
coal boreholes. The method of NGL is used in investigating holes
drilled during prospecting for boron material, while the method

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The present state of...

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D228/D305

of selective GGL is employed when searching for deposits of lead, tungsten and mercury. The method of neutron activation is used when studying the displacement of water neutron-logging.
[Abstracter's note: Complete translation.]

Card 2/2

GORDEYEV, Yu.I.

Is the creation of the Lower Ob' Sea justified? Priroda 52
no.6:51-54 '63. (MIRA 16:6)

1. Okruzhnoy muzey, Khanty-Mansiysk.
(Ob' Valley—Reservoirs)
(Ob' Valley—Conservation of natural resources)

GORDEYEV, Yu.l.

Some data on birds of the Kazym Valley (Tyumen Province).
Ornitologija no.6s469-470 '63. (MIRA 17:6)

GORDEYEV, Yu.I.

Ornithofauna of the eastern part of the Khanty-Manai National Reserve
(Tyumen' Province). Ornitologiya no.7:456-467 '65.

(MIRA 18:10)

AFROSIMOV, V.V.; GLADKOVSKIY, I.P.; GORDEYEV, Yu.S.; KALINKEVICH, I.F.;
FEDORENKO, N.V.

Method for investigating a flux of atoms emitted by a plasma.
Zhur. tekhn. fiz. 30 no.12:1456-1468 D '60. (MIRA 14:1)

1. Fiziko-tehnicheskiv institut AN SSSR, Leningrad.
(Plasma (Ionized gases))

AFROSIMOV, V.V.; GLADKOVSKIY, I.P.; GORDEYEV, Yu.S.; KALINKEVICH, I.F.;
PETROV, M.P.; FEDORENKO, N.V.

Investigating a flow of neutral atomic particles emitted by a
plasma using the "Al'fa" installation. Zhur. tekhn. fiz. 30
no.12:1469-1484 D '60. (MIRA 14:1)

1. Fiziko-tehnicheskiy institut AN SSSR i Nauchno-issledovatel'skiy
institut elektrofizicheskoy apparatury.
(Plasma (Ionized gases))

GORDEYEV, Yu, S., PANOV, M., N., and FEDORENKO, N. V., AFROSIMOV, V. V.,

"Characteristic Energy Losses in Single Collisions of Atomic Particles"

report presented at the 3rd Intl Conf. on Physics of Electronics and Atomic Collisions
London, 22-26 Jul 63

ACCESSION NR: AP4035696

8/0057/64/034/005/0857/0860

AUTHOR: Gordyev, Yu.S.; Panov, M.N.

TITLE: Ionization and electron attachment by hydrogen ions in collisions with gas molecules and atoms

SOURCE: Zhurnal tehnicheskoy fiziki, v.34, no.5, 1964, 857-860

TOPIC TAGS: ionization, electron attachment, ionization phenomena, ion collision, nitrogen, argon, hydrogen

ABSTRACT: The cross sections for ionization and electron attachment by H^+ , H_2^+ and H_3^+ ions in collisions with H_2 , N_2 , and A molecules were measured for incident ion energies from 1 to 40 keV, and the results are presented graphically and are compared with those of other workers. The apparatus employed was described by N.V.Fedorenko, V.V.Afrozimov and D.M.Kaminker (ZhTF 26,1929,1956). The ion beam was selected by a monochromator, defined by slits, and directed through a collision chamber containing gas at such pressure that multiple collisions could be neglected. The cross sections were calculated from the total electron current and the current of ionized gas molecules by neglecting the possibility of electron stripping from

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ACCESSION NR:AP4035696

the incident ions by the gas molecules. *Abstracter's note:* The "potential method" by which the electron and ion currents were measured is not described in the present paper. The means adopted by the authors cited above were employed to eliminate edge effects, and measures were taken to avoid the effects of secondary emission and reflection of ions scattered from the primary beam. The error of the measurements is estimated to be 15%. The ionization cross section increased monotonically with energy over the range investigated. The results deviated by more than the experimental error from those of H.B.Gilbody and J.B.Hasted (Proc.Roy.Soc.A240, 382, 1957) but agreed satisfactorily with those of several other groups. The calculations of D.R.Bates and G.H.Gritting (Proc.Phys.Soc.A66, 961, 1953) reproduce the proton hydrogen cross sections satisfactorily for energies greater than 6 keV, but the calculated values are too small at lower energies. This discrepancy is ascribed to the use of the Born approximation in the calculations. The electron attachment cross sections reached maxima in the energy range investigated, the maxima occurring at higher energies for the heavier ions. The results agreed reasonably well with those of other workers, with one exception: the cross section obtained for electron attachment by H_2^+ from H_2 at 1 keV was considerably greater than that reported by S.N.Chosh and W.F.Sheridan (J.Chem.Phys.26, 480, 1957). "The authors thank Prof.N.V.

Card 2/3

ACCESSION NR: AP4035696

Fedorenko and V.V.Afrapsimov for advice and constant interest in the work." Orig.
art. has: 2 figures.

ASSOCIATION: Fiziko-tehnicheskiy institut im.A.Y.Ioffe AN SSSR Leningrad (Physico-
technical Institute, AM SSSR)

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OTHER: 007

Card 3/3

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P-6/Pab-10/P1-4 IJP(s)/AEVU/AEP(t)-2/SSD/SDD(qe) AT
ACCESSION NR: AP4045272 S/0057/54/034/000/1613/1623

AUTHOR: Afrosimov, V.V.; Gordoyev, Yu.S.; Panov, M.N.; Fedorenko, N.V.

TITLE: Investigation of elementary atomic collision processes by a coincidence method.

SOURCE: Zhurnal tehnicheskoy fiziki, v.34, no.9, 1964, 1613-1623

TOPIC TAG: particle collision, coincidence counting, charge exchange, ion interaction

ABSTRACT: The authors describe in some detail an apparatus that they previously reported briefly (Report No.11-11, Fourth International Conference on Ionization Phenomena in Gases, Paris, July 8-13, 1963), by means of which the charge and momentum of both participants in an atomic collision can be determined. The initial ion beam is accelerated, monochromatized by magnetic deflection, focused by a magnetic pole, and directed into a charge exchange chamber provided with collimating slits. The charge exchange chamber may contain a gas to provide a beam of energetic neutrino atoms by charge exchange, or it may be evacuated when collisions of ions with atoms in a gas are to be observed. The apparatus is used to determine the energy and momentum of the particles after a collision.

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L 15058-65

ACCESSION NR: AP4045272

electrostatic deflection, and to collect and analyze the slow ions produced by charge exchange. After leaving the charge exchange chamber the beam traverses the collision chamber. With the collision chamber communicate two identical receiving channels, which are adjustable in azimuth and serve to analyze and detect the scattered and recoil particles. After entering a receiving channel, the particle passes through a series of collimating slits and a deflecting magnetic field, and enters the detector. The magnetic deflecting section provides two possible paths for the particles: a straight path to accommodate neutral particles, and a path with a fixed radius of curvature, wherein the momentum-to-charge ratio of the particle can be determined from the value of the magnetic field required for its successful passage. Each receiving channel is provided with two particle detectors, one for each of the two paths through the magnetic deflecting section. These detectors operate by detecting with a scintillator the secondary electrons produced by the incident particle. Ions entering the detector are accelerated to about 20 keV before striking the target; under these conditions for ions and atoms having energies greater than 10 keV, the detecting efficiency is 100%. For low energy atoms the detecting efficiency is low. The pulses from the detectors are fed into an adjustable delay coincidence circuit. With this apparatus, the direction and the charge of both the scattered and recoil particles are measured.

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L 15058-55

ACCESSION NR: AP4045272

3

ed, and thus all the relevant parameters of the collision are determined. Several curves relating to argon collisions are presented to illustrate the performance of the instrument and the extent to which certain misadjustments can be tolerated. "The authors express their gratitude to I.F.Kalinkevich and V.M.Layrov for constructing and adjusting part of the electronic equipment." Orig. art. has 2 tables and 4 figures.

ASSOCIATION: Fiziko-tehnicheskiy institut im.A.F.Ioffe AN SSSR, Leningrad (Physical-
co-technical Institute, AN SSSR)

SUBMITTED: 25Feb64

ENCL: CO

SUB CODE: NP NR REV SC7: 009

OTHER: 006

3/3

L 15057-65 EMT(1)/EWG(1)/EPA(sp)-2/ECC(b)-2/EPA(w)-2/EEC(t)/T/EMI(w)-2/P2-4/
Po-4/Pab-10/R1-4 LJP(c)/SSD/ASD(1)-5/AEDC(a)/AFWL/BSD/SSD(a)/AEDC(b)/AS(1)-2/ESD
ACCESSION NR: AP4045273 AT 8/0057/64/034/009/1624/1636

AUTHOR: Afrosimov, V.V.; Gordeyev, Yu.S.; Panov, M.N.; Fedorenko, N.V.

TITLE: Characteristic energy losses in atomic collisions

SOURCE: Zhurnal tehnicheskoy fiziki, v.34, no.9, 1964, 1624-1638

TOPIC TAGS: inelastic scattering, excitation spectrum, ionization, particle collision

ABSTRACT: Collisions of argon atoms or ions with argon atoms of the type A^{k+} (incident particle) + $A \rightarrow A^{m+} + A^{n+} + (m+n-k)e$ (e is the electron charge) were investigated by means of the apparatus described elsewhere by the authors (ZhTF 34, 1613, 1964; see Abstract AP4045272). The collisions were investigated at impact parameters (closest approach distances) from 0.159 to 0.32 Å, for incident particle energies of 12.4 and 50 keV, for the values of 0 and 1 of k , and for values of m and n from 1 to 6. The largest value of $m+n$ was 11. The cross sections of all these collision processes showed a series of maxima as functions of the inelastic energy loss. When the ionization energy was subtracted from the inelastic energy loss and the cross section was plotted against the difference, i.e., against the ex-

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L 15057-6*

ACCESSION NR: AP4045273

cess inelastic energy loss over that due to ionization, the peaks occurred at the same positions for all the collisions. Three such peaks were observed; they occurred at excess energy losses of 33±14, 263±16 and 473±22 eV. Essentially the entire width of each of these peaks could be explained by temperature and instrumental broadening, and it is concluded that the peaks are in fact very narrow. Although the positions of these peaks did not depend on the nature of the collision, their relative heights did. Small impact parameters, and collision processes involving large ionization energies, favored excitation of the lines representing large excess inelastic energy losses. Two possible mechanisms involving ejection of electrons from inner shells and subsequent Auger transitions are discussed and rejected, and it is suggested that the explanation, when it comes, will probably involve the excitation of collective vibrations of the electrons during the collision. "The authors express their gratitude to N. Amus'ya for valuable discussions." Orig.art. has: 13 formulas, 5 figures and 1 table.

ASSOCIATION: Fiziko-tehnicheskiy institut im.A.P.Yoffe AN SSSR, Leningrad (Physico-technical Institute, AN SSSR)

SUBMITTED: 25Feb84

ENCL: 00

SUB CODE: NP

OTHER: 013

NR REP BOV: 006

2/2

L 15056-45 EEC(b)-2/EPA(w)-2/ENG(X)/EMT(1)/EPA(sp)-2/ENP(w)-2/EEC(t)/I/EMT(s)-
Po-4/P1-4/P2-6/Pab-10 IIP(c)/SSD(a)/SSD/AEDG(a)/AFWL/ASD(a)-5/ASD(-)/-
ACCESSION NR: AP4045274 EID(as) AT 8/0057/64/034/000,7657,7644

AUTHOR: Afrosimov, V.V.; Gordeev, Yu.S.; Panov, M.N.; Fedorenko, N.V.

TITLE: Elementary processes of charge change in atomic collisions

SOURCE: Zhurnal tehnicheskoy fiziki, v.34, no.9, 1984, 1637-1644

TOPIC TAGS: inelastic scattering; ionization; particle collision; charge exchange; argon

ABSTRACT: Close collisions of argon ions with argon atoms, of the type $A^+ + A \rightarrow A^{m+} + A^{n+} + (m+n-1)e^-$, were investigated with the apparatus described by the authors elsewhere (ZhTF 34, 1613, 1984; see Abstract AP4045272), with which it is possible to determine all the relevant parameters of the collision, and the cross sections for the various processes are compared. The energy of the incident argon ions was always 50 keV. In addition to the distance r_0 of closest approach, which varied from 0.183 to 0.303 Å, and the charges m and n of the scattered and recoil ions, which ranged up to 6, a collision was characterized by one of the three possible discrete values, R_1^* (33 eV), R_2^* (263 eV), R_3^* (475 eV), of the excess of the inelastic energy loss over the ionization energy, discussed by the authors in the

1/2

L 15056-65
ACCESSION NR: AP4045274

preceding paper (ZhTF 34, 1624, 1964; Abstract AP4045273). For the discussion the parameters m and n were replaced by $N = m + n - 1$ and $d = m - n$. The most probable value N_{max} of N was found to depend both on r_0 and on the "level" R^* excited: N_{max} increased with decreasing r_0 and with increasing R^* . It had previously been shown (loc.cit.supra) that κ tended to increase with decreasing r_0 . The relative probability for obtaining a given value of N was found to be given for all collisions by the same expression, $\exp(-3(N-N_{\text{max}})^2/2N_{\text{max}})$, where N_{max} is the value appropriate to that of r_0 and the R^* level realized in the collision. The distribution of the parameter κ was symmetric about $d = 0$ and was nearly independent of N . The nearly symmetric distribution of N and the symmetric distribution of d are regarded as further evidence in favor of the authors' previous conclusion (loc.cit.supra) that the occurrence of discrete values of the inelastic energy loss is in some manner associated with excitation of collective motion of the electrons within the colliding atoms.

Orig.a:t.has: 7 formulas and 5 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut im.A.F.Ioffe AN SSSR, Leningrad (Physico-technical Institute, AN SSSR)

SUBMIT'ED: 25Feb64

ENDL: OO

SUB CODE: MP

NR REF BOV: 007

OTHER: 003

2/2

L 9298-66 EWT(1)

ACC N# AP5026412

SOURCE CODE: UR/0386/65/002/006/0291/0296

44, 55 44, 55 44, 55
AUTHOR: Afrosimov, V. V.; Gordiyev, Yu. S.; Panov, M. N.; Fedorenko, N. V.ORG: Physicotechnical Institute im. A. F. Ioffe, Academy of Sciences SSSR (Fiziko-
tekhnicheskiy institut Akademii nauk SSSR) 44, 55 21, 19, 55TITLE: Ionization and scattering with characteristic energy losses in atomic colli-
sionsSOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu.
Prilozheniye, v. 2, no. 6, 1965, 291-296TOPIC TAGS: atomic physics, ionization, collision cross section, argon, krypton,
neon

ABSTRACT: This is a continuation of an earlier investigation (ZhTF v. 34, 1613, 1624, and 1637, 1964) of the elementary acts of collisions between ions and argon atoms having kev energies at impact parameters smaller than the atomic dimensions, where it was found that the spectrum of the excess inelastic loss is not continuous, but consists of relatively narrow discrete lines, the energies of which do not depend on the shortest distance between the nuclei, on the relative velocity of the particles, or on the scheme of the elementary process by which the charge states are changed. To determine the extent to which the observed phenomenon is general, the authors investigated collisions between ions and atoms of different noble gases. The measured excess inelastic energy loss R^* for the $\text{Ne}^+ + \text{Ar}$ pair was found not to de-

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2

L 9298-66

ACC NR: AP5026412

pend on the scheme of the elementary process. Excitation of several R* lines was observed in the investigated interval of shortest distances between the nuclei of the colliding particles. The regions in which one R* line is excited, and the region where the transition occurs from excitation of one line to excitation of another, do not shift when the relative particle velocity changes. However, excitation of lines with different energies were observed when the velocities were different. Analogous results were obtained for Kr⁺ + Kr pair at 25 and 50 kev. In this case, three characteristic R* lines were observed in the interval 100--600 ev. For the Ne⁺ + Ne pair at 50 kev, one R* line with energy ~160 ev was observed. The authors investigated the connection between the excitation of the characteristic lines and the charges of the colliding particles. When like particles collide ("symmetrical" pairs Ar⁺ + Ar, Kr⁺ + Kr) this connection is manifest in a clear-cut correlation between the average charge of the scattered particles and the inelastic energy loss. No such correlation is observed when an "asymmetrical" pair is investigated (Ne⁺ + Ar, energy 25 kev). The scattering of the colliding particles was also investigated in detail. It was found that the total differential scattering cross section is not, as heretofore assumed, a continuous function of the scattering angle, and singularities are observed when the measured cross sections are compared with the cross sections calculated for a continuously varying interaction potential. In the transition region, the experimental scattering cross sections differ most strongly from the calculated ones, with deviations in the form of maxima. The effect is observed for all the investigated pairs and suggests that the real interaction potential is not a continuous function

Card 2/3

L 9298-56

ACC NR: AP5026412

of the shortest distance, but changes abruptly on going from the excitation of one characteristic line to the excitation of another. It is difficult at present to present an unambiguous interpretation of the observed effects. The explanation offered earlier, based on the assumption that vacancies are produced in the inner shells of the colliding particles and are followed by Auger transitions, is in poor agreement with the experimental data, as are other hypotheses. Authors thank M. Ya. Amus'ya for a discussion of the results and A. P. Shergin and Z. Z. Latypov for help with some of the measurements. Orig. art. has 3 figures. 44,55

SUB CCODE: 20/ SUBM DATE: 29Jul65/ ORIG REF: 002/ OTH REF: CCN 44,55

44,55

JC
Card 2/3

2

AFROSIMOV, V.V.; GORDEYEV, Yu.S.; PANOV, M.N.; FEDORENKO, N.V.

Ionization and scattering in the characteristic energy losses
in atomic collisions. Pis'm. v red. Zhur.eksper. i teor.fiz.
2 no.6:291-296 S '65. (MIRA 18:12)

1. Fiziko-tehnicheskiy institut imeni Ioffe AN SSSR. Submitted
July 29, 1965.

L 21710-66 EWT(1) AT

ACC NR: AP6004887

SOURCE CODE: UR/0057/66/036/001/0123/0131

AUTHOR: Afrosimov, V.V.; Gordeyev, Yu.S.; Panov, M.N.; Fedorenko, N.V.

63

60

B

ORG: Physicotechnical Institute im. A.F. Ioffe, AN SSSR, Leningrad (Fiziko-tehnicheskiy institut AN SSSR)

TITLE: Ionization and scattering with characteristic energy losses in atomic collisions

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 1, 1966, 123-131

TOPIC TAGS: ionization, inelastic scattering, argon, neon, krypton,
excitation energy, particle collision, ion energy

ABSTRACT: The characteristic inelastic energy losses (energies carried off by electrons and radiation), previously investigated in Ar⁺-Ar collisions by the present authors (Compt. Rend. de la VI-e Conf. Int. Phen. d'Ionisat. dans les Gas, eds. SERMA, 1, 111, Paris, 1963; ZhTF 34, 1613, 1964; ZhTF, 34, 1624, 1964; ZhTF, 34, 1637, 1964) and confirmed by E.Everhart et al (Phys. Rev. Lett., 14, 247, 1965; Phys. Rev. Lett., 14, 484, 1965), have been further investigated in Ne⁺-Ne, Ar⁺-Ar, Kr⁺-Kr, and Ne⁺-Ar collisions at incident ion energies of 12, 25, and 50 keV, using the apparatus and techniques described in the earlier papers. Characteristic inelastic energy loss "lines" were observed in all the investigated systems. The probabilities for "excitation" of the different "lines" (occurrence of the different characteristic energy

Cord 1/2

UDC: 533.9

L 21710-66

ACC NR: AP6004887

3

losses) were nearly independent of the incident ion energy but depended strongly on the distance of closest approach; the positions of the lines, however, did depend somewhat on the incident ion energy. The curves representing the composition with respect to charge of the scattered particles as a function of scattering angle revealed regions of slow and rapid change associated with excitation of the different characteristic lines, and the differential cross section deviated from a smooth curve at scattering angles associated with excitation of the characteristic lines. There was no simple relation between the characteristic lines excited in Ne^+ -Ar collisions and those excited in Ne^+ -Ne and Ar^+ -Ar collisions; from this it is concluded that the lines are not to be ascribed to excitation of any energy levels characteristic of the isolated atoms. Difficulties are pointed out that are encountered in attempts, including the attempt of U.Fano and W.Lichten (Phys. Rev. Lett., 14, 627, 1965), to account for the experimental results by invoking Auger transitions. The authors argue in favor of their earlier hypothesis involving excitation of collective vibrations of the electron shells. The authors thank M.Ya.Amus'ya for valuable discussions, and A.P.Shergin and Z.Z.Latypov for participating in the work. Orig. art. has: 7 figures.

SUB CODE: 20/

SUEN DATE: 05Aug65/

ORIG REF: 002/

OTH REF: 008

Card 2/2 dda

GORDEYEVA, A.A.

Providing advanced training for nonprofessional medical personnel
in Ugodskiy Zavod District, Kaluga Province. Zdrav.Ros.Fed. 2 no.9
24-26 8'58
(MIRA 11:10)

1. Glavnyy vrach Ugodsko-zavodskogo rayona Kalugskoy oblasti.
(UGODSKIY ZAVOD DISTRICT—MEDICINE—STUDY AND TEACHING)

1. GORDEYeva, A. F.
2. USSR (600)
4. Cells
7. Certain form of cell ontogenesis, Dokl. AN SSSR, 86, No. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

GORDEYEVA, A. F.

"Data on the Forms of Growth and the Development of Cells in the Chorion in Human and Rabbit Embryos." Cand Biol Sci, Stavropol' State Medical Inst, Stavropol', 1953. (RZhBiol, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (13) SO: Sum 598, 29 Jul 55

RIVUTSKAYA, P.S.; GORDEYEVA, A.F.

Data on the problem of propagation and development of cellular
and non-cellular forms of living substance. Zhur.ob.biol.15 no.1:31-46
Ja-J '54.
(MIRA 7:2)
(Cells)

GORDEYEVA, A.F., detsent

Characteristics of endomitosis in the epithelial cells of
the chorion in the embryos of rabbits. Uch. zap. Stavr.
gos. med. inst. 12:153-154 '63. (MIRA 17:9)

1. Kafedra gistologii i embriologii (zav. prof. P.S. Revutskaya)
Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

GORDEYEVA, A.F.

Morphological changes in the nuclei of the giant cells of the trophoblast from the antimesometrial part of the uterus in a pregnant rabbit; polyploidy in mammalian cells. TSitologiya. 6 no.3:348-352 My-Je '64. (MIRA 18:9)

1. Kafedra gistologii i embriologii Stavropol'skogo meditsinskogo instituta.

GORDEYEVA, A. I.

21030 Gordeyeva, A.I. Kozhniye Allergicheskiye prosy i vi dremlyushchey infektsii posk ognestren'nykl Ranenii Trudy In-ta (Kazansk Nauch-issled in-t ortopidii i vosstanovit Khirurgii) t.111, 1949, s. 200-05.

SO: LETOPIS ZHURNAL STATEY - Vol. 28, Moskva, 1949

USSR/Human and Animal Morphology (Normal and Pathological)
Peripheral Nervous System

S-3

Abs Jour : Rof Zhur - Biel., No 12, 1958, No 55090

Author : Gordayev A. I.

Inst : Not Given

Title : Significance Applied to the Innervation of the Tibia.

Orig Pub : V sb.: Vopr. ortopedii i travmatol. Teoriya i klinika, Kezani,
Tetkniqoizdat, 1957, 218-235

Abstract : No abstract

Card : 1/1

GORDEYEVA, A. I., CAND MED SCI, "INNERVATION OF SHIN
MUSCLES IN THE LIGHT OF APPLIED SIGNIFICANCE." KAZAN¹, 1961.
(KAZAN¹ ~~SCI RES INST~~ OF TRAUMATOLOGY AND ORTHOPEDICS,
CHAIR OF OPERATIVE SURGERY AND TOPOGRAPHICAL ANATOMY OF
KAZAN¹ STATE INST FOR ADVANCED TRAINING OF PHYSICIANS IM
V. I. UL'YANOV-LENIN). (KL, 3-61, 231).

409

GORDYEVA, A.M.

Rare case of torsion of the uterus with fibroma already present in the uterine walls. Akush. i gin. 34 no.6:103-104 N-D '58. (MIRA 12:1)

1. Otdelencheskaya zheleznodorozhnaya bol'nitsa (nach A.V. Zhivetskiy)
'stantai Chernovtsy L'vovskoy zheleznoy dorogi.
(UTERUS--DISEASES)

SIRREBROV, M.A.; GORDEYEVA, A.P.; BAYUN, V.N.

True rupture of the healthy heart. Khirurgiia 36 no.3:120-121
Mr '60. (MIRA 13:12)
(HEART—DISEASES)

VERNER, A.R.; GORIYEVA, E.A.

Oxygen and hydrogen sulfide content of the soil water of Baraba.
Pochvovedenie '52, 1012-18. (MLRA 5:12)
(CA 47 no.13:6591 '53)

MOSHKINA, I.A.; GORDEYEVA, G.I.; NIKOL'SKAYA, Yu.P.

Quaternary reciprocal system Na, Ca // SO_4^{2-} , HCO_3^- - H_2O at 0°
at various partial pressures of CO_2 . Izv. SO AN SSSR no.3:
Ser. khim. nauk no.1:20-26 '65. (MIRA 18:8)

1. Institut fiziko-khimicheskikh osnov pererabotki mineral'nogo
syr'ya Sibirskogo otdeleniya AN SSSR, Novosibirsk.

GOREYEVA, K.M.

Studying species of the parasites of scale and pseudoscale insects. Zashch. rast. ot vred. i bol. 5 no. 8:44 Ag '60.
(MIRA 13:12)

1. Starshiy agronom Pyatigorskoy biolaboratorii.
(Insects, Injurious and beneficial--Biological control)
(Scale insects)

GORDEYEVA, K. T. Cand. Biolog. Sci.

Dissertation: "Data on the Quantitative Study of the Zoobenthos of the West Kamchatka Shelf." Moscow Technical Inst of Fish Industry and Economy imeni A. I. Mikoyan, 28 Mar 47.

SO: Vechernaya Moskva, May, 1947 (Project #17836)

GORDIYEVA, K.V.

Paths of fat distribution in the organism. Uch.zap.Len.un.bo.138:
71-90 '52.
(MIRA 9:6)

1.Iz kafedry chmernaya veshchestva Leningradskogo gosudarstvennogo
universiteta imeni A.A.Zhdanova.
(FAT METABOLISM)

GORDEYEVA, K.V.; MOZZHUKHINA, A.S.

Changes in certain physical and chemical properties of plasma proteins
in animals in acute radiation sickness. Med.rad. 4 no.10:13-17 O '59.

(MIRA 13:2)

(RADIATION INJURY exper.)
(BLOOD PROTEINS radiation eff.)

GORDEYEVA, K.V.; KOSYAKOV, K.S.; PAVLEVA, L.M.; POPEL', L.V.

Changes in various properties of fibrinogen in radiation sickness.
Probl. gemat. i perel. krovi 5 no. 9:11-15 '60. (MIRA 14:1)
(RADIATION SICKNESS) (FIBRINOGEN)

GORDEYEVA, K.V.

Effect of insulin and glucose on the glycogen content of the liver
in radiation sickness. Vop.med.khim. 6 no.4:408-411 Jl-Ag '60.
(MIRA 14:3)

1. The S.M.Kirov Military Medical Academy, Leningrad.
(RADIATION SICKNESS) (INSULIN)
(BLOOD SUGAR) (LIVER)

GORDEYEVA, K.V.

Interrelationship between the increase in fibrinogen concentration in dogs in radiation sickness and the activity of fibrinogenase. Biul.eksp.biol.i med. 54 no.11:39-42 N '62.

(MIRA 15:12)

1. Iz Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova, Leningrad. Predstavlena deystvitel'nym chlenom AMN SSSR A.V. Lebedinskim.

(FIBRINOGEN) (RADIATION SICKNESS) (FIBRINOGENASE)

L 10073-63

EPF(n)-2/EWT(m)/BDS--AFFTC/ASD/SSD--Pu-1

ACCESSION NR: AP3002257

8/0089/63/014/006/0530/0534

AUTHOR: Gordeyeva, L. D.; Sdorenkin, G. N.

60

TITLE: An empirical formula for the average number of fission neutrons

SOURCE: Atomnaya energiya, v. 14, no. 6, 1963, 530-534

TOPIC TAGS: fission neutrons, U²³³, U²³⁵, Th²²⁹, Pu²³⁹, Pu²⁴¹, Am²⁴¹

ABSTRACT: The possibility is shown of expressing the data concerning the average number of instantaneous neutrons (ANN) emitted during fissions, by a linear relationship between the charge and mass number of the atom undergoing fission. An empirical formula is obtained for the fission of six nuclei (Th²²⁹, U²³³, U²³⁵, Pu²³⁹, Pu²⁴¹, Am²⁴¹) bombarded by thermal neutrons. The formula is then generalized for nuclei with any even number of nucleons by introducing an even-odd factor. The formula permits the prediction of the ANN in a forced fission for the practically important nuclei: Z equal or greater than 90, N = A-Z equal or less than 152. "The authors express their gratitude to I. I. Bondarenko and L. N. Usachev for valuable suggestions and comments." Orig. art. has: 2 figures, 2 tables, and 4 equations.

Card 1/2

OKOLOVICH, V.N.; BOL'SHOV, V.I.; GORDEYEVA, L.D.; SMIRENKO, G.N.

Dependence of the mean kinetic energy of fragments on the mass of
the fissionable atom. Atom. energ. 15 no. 5:419-420 N '63.(MIRA 16:12)

SOLDATOV, A.S.; ALEKSANDROVA, Z.A.; GORDEYEVA, L.D.; SMIRENKIN, G.N.

Angular distribution of fragments in the photofission of U^{238} and
 Th^{232} by gamma rays from the reaction $F19(p, \alpha')$ O^{16} . IAd. fiz.
1 no.3:471-475 Mr '65. (MIRA 18:5)

USSR / General Biology. Physical and Chemical Biology. B

Abs Jour : Ref Zhur - Biologiya, No 4, 1959, No. 14275

Author : Kamnev, I. Ye., Gordeyeva, L. F.

Inst : Rostov-on-the-Don Medical Institute

Title : Reactive Cell Changes of the Cornea in
Animals, Effected by the Action of Hypertonic
Ringer's Salt Solutions

Orig Pub : Tr. Otchetn. nauchn. konferentsii (Rostovsk.-
n/D. Med. in-t) za 1956. Rostov-na-Donu,
1957, 213-216

Abstract : The possibility of increasing the intensity
of intracellular processes by the action of
hypertonic salt solutions, glucose solutions,
prepared in an isotonic Ringer solution and
 $O_2O_1O_2$ in various concentrations, were studied.
Experiments were carried out with the cornea

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USSR / General Biology. Physical and Chemical Biology. B

Abs Jour : Ref Zhur - Biologiya, No 4, 1959, No. 14275

of a frog; the formation rate of granules of neutral red served as an indicator for the intensity of intracellular processes. The deposition of granules is intensified at a temperature of above 20° as well as in 2 and 4 percent glucose solutions and 2-4 multiple Ringer solutions. High (above 27°) and low (0°) temperatures and high concentrations of salts and glucose produce a retardation of the granule formation. The most stable are those which form at the beginning when the first granules of the dye appear and the environmental conditions undergo various changes. --
V. V. Polovtsova

Card 2/2

KARAEV, I.Ye.; GUDKHOVA, L.P.

Differential vital staining of intact and altered cells and a
method of preparing stable vitally stained preparations. TSitolo-
gia 1 no.4:450-453 Jl-Ag '59. (MIRA 12:10)

1. Kafedra obshchey biologii Rostovskogo-na-Donu meditsinskogo
instituta. (STAINS AND STAINING (MICROSCOPY))

KAMNEV, I.Ye.; GOHDEYEVA, L.Y.

Method for permanent vitally stained preparations. Arkh.snat.
gist.i embr. 37 no.12:89-90 D '59. (MIRA 13:5)

1. Kafedra obshchey biologii (zav. - prof. I.Ye. Kamnev) Rostovskogo na Donu Gosudarstvennogo meditsinskogo instituta. Adres avtorov: Rostov-na-Donu, Makhichevanskiy pr., d.38, Rostovskiy gosmedinstitut, kafedra obshchey biologii.
(STAINS AND STAINING)

KAMNEV, I.Ye.; GORDEYEVA, L.F.

A method for intravital differential staining of normal and damaged cells. Arkh. anat. gist.i embr. 38 no.1:99 Ja '60. (MIRA 13:7)

1. Kafedra obshchey biologii (zaveduyushchiy - doktor biol.nauk, prof. I.Ye. Kamnev) Rostovskogo gosudarstvennogo meditsinskogo instituta. Adres avtorov: Rostov-na-Donu, Nakhichevanskiy pr., 38; Rostovskiy Gosudarstvennyy meditsinskiy institut, kafedra obshchey biologii. (STAINS AND STAINING (MICROSCOPY))

KAMNEV, I.Ye.; GORDEYEVA, L.F.

Process of excitation in the epithelial tissues and cells.
TSitologija 4 no.3:347-353 My-Je '62. (MIRA 16:3)

1. Kafedra obshchey biologii i parazitologii Rostovskogo-na-Donu
meditsinskogo instituta.
(EPITHELIUM)

GORDEYEVA, L.I. (Stantsiya Tarasovskaya, Yaroslavskoy zheleznoy dorogi,
poselok Cherkizovo, Vokzal'naya ul., 21)

Macro-microscopic study of age and functional features of the
lymphatic system of the breast. Arkh. anat. gist. embr. 39
no. 10:79-93 O '60. (MIRA 14:2)

1. Kafedra anatomii cheloveka (zav. - chlen-korrespondent AMN
SSSR prof. D.A. Zhdanov) 1-go Moskovskogo ordena Lenina meditsinskogo
instituta imeni I.M. Sechenova.

(BREAST) (LYMPHATICS) (AGING)

GORDEYEVA, L.I. (Moskovskaya oblast, st.Tarasovskaya, Yaroslavskaya
zheleznyaya doroga, pos. Cherkizovo, Vokzal'naya ul., 21)

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41 no.9:67-75 S '61.

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prof. D.A. Zhdanov) I Moskovskogo ordena Lenina meditsinskogo instituta
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(BREAST--DISEASES) (BREAST--AGING)

GORDEYEVA, L.I. (St. Tarasovskaya, Yaroslavskoy zheleznoy dorogi, pos.
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KULAYEVA, Lyudmila Iosifovna; LUPANDINA, Ol'ga Sergeyevna;
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Diffusion coating of steel by metals from a gaseous medium
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L 11076-63

EWP(q)/EWT(m)/BDS AFFTC/ASD JD/JG

ACCESSION NR: AP3001055

S/0148/63/000/004/0129/0131

AUTHOR: Grdina, Yu. V.; Gordeyeva, L. T.; Timonina, L. G.

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TITLE: Carburization of titanium with the use of a paste carburizer and high-frequency induction heating

SOURCE: IVUZ. Chernaya metallurgiya, no. 4, 1963, 129-131

TOPIC TAGS: titanium carburizing, case depth, wear resistance, high-frequency induction heating, induction heating

ABSTRACT: A method of Ti carburization with a pastelike carburizer and high-frequency induction heating in an He atmosphere has been developed by the authors. Specimens of Ti alloys VT4 [4-5% Al, 1-2% Mn] and VT6 [C-120 AV-AISI] 3 mm in diameter and 200 mm long or 40 mm in diameter and 10 mm thick were coated with a paste consisting of silver graphite and a binder, dried, heated to 850-1100°C, and held for 10, 15, 20, and 30 min. With a carburization time of 15 min the depth of the carburized layer reached 0.25 mm, and the maximum hardness, 1780 HV₅₀. The disk-shaped specimens were tested for wear resistance at 220 rpm under a 75-kg load without lubricant. Wear resistance was found to vary with carburization

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time. The best results were obtained in specimens carburized for 15 min; they had almost no weight loss in a 4-hr test. With carburization time of 10 min the carburized layer was worn off in 20 min. Specimens carburized for 20 min and 30 min resisted well for 2 hr, but then were worn off rapidly. Orig. art. has: 3 figures.

ASSOCIATION: Sibirskiy metallurgicheskiy institut (Siberian Metallurgical Institute)

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